Appendix A

Clean Copy of Amended Claims (39, 41, 43, 47, 52, 55, 61, 68, 69, and 71-76)

39. (Twice Amended) A method for early detection of subacute, potentially catastrophic illness in an infant comprising:

(a) monitoring time series of RR intervals in the infant;

(b) identifying at least one characteristic abnormal pattern or distribution; and

(c) correlating the at least one abnormal pattern or distribution with said illness.

41. (Twice Amended) The method of claim 40, wherein antibiotic therapy is initiated and a diagnostic work-up for the illness, comprising obtaining a blood culture from the patient, is provided when the at least one characteristic abnormal pattern or distribution is identified.

43. (Twice Amended) The method of claim 42, wherein a diagnostic work-up for the illness, comprising an X-ray of the infant or a pathological specimen from the infant, is provided when the at least one characteristic abnormal pattern or distribution is identified.

47. (Twice Amended) The method of claim 45, wherein the at least one characteristic abnormal pattern or distribution is identified based on at least one of the third and higher moments of the data set.

52. (Twice Amended) The method of claim 45, wherein the at least one characteristic abnormal pattern or distribution is identified based on at least one percentile value of the data set.

55. (Twice Amended) The method of claim 45, wherein the at least one characteristic abnormal pattern or distribution is identified based on the variance, standard deviation or coefficient of variation of the data set.

61. (Twice Amended) The method of claim 39, wherein a diagnostic work-up is provided when the at least one characteristic abnormal pattern or distribution is identified.

68. (Amended) The method of claim 39, wherein the at least one characteristic abnormal pattern or distribution is identified from a set of RR intervals.

69. (Amended) An apparatus for early detection of subacute, potentially catastrophic infectious illness in a patient, wherein the patient is an infant, a newborn infant, a toddler, or a child, the apparatus comprising:

(a) a monitoring device, continuously monitoring time series of RR intervals in the patient; and

(b) a microprocessor, identifying at least one characteristic abnormal pattern or distribution in the RR intervals that is associated with the illness.

71. (Amended) The apparatus of claim 69, wherein the microprocessor performs the step of generating a normalized data set of RR intervals.

72. (Amended) The apparatus of claim 71, wherein the microprocessor calculates one or more of the third and higher moments of the data set and identifies the characteristic abnormal pattern or distribution based on the one or more moments.

73. (Amended) The apparatus of claim 72, wherein the microprocessor calculates the skewness of the data set and identifies the characteristic abnormal pattern or distribution based on the skewness.

74. (Amended) The apparatus of claim 72, wherein the microprocessor calculates the kurtosis of the data set and identifies the characteristic abnormal pattern or distribution based on the kurtosis.